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III. CLAIM AMENDMENTS

1. (Currently Amended) A method of predicting a signalling code from an n^{th} order set of orthogonal signalling codes of length 2^n for a communications system, the signalling code corresponding to a code spur, comprising ~~the steps of~~:

selecting an odd number of at least three signalling codes from the n^{th} order set of orthogonal signalling codes within a code space; ~~and~~

performing an operation on the at least three signalling codes, the operation corresponding to a vector product of the at least three signalling codes, when the at least three signalling codes are expressed in a bipolar form, to predict the signalling code corresponding to the code spur; and

identifying signalling codes from the n^{th} order set of orthogonal signalling codes of length 2^n having a lower occurrence of code spurs coinciding with active signalling codes than signalling codes amongst the n^{th} order set of orthogonal signalling codes.

2. (Currently Amended) A method of predicting a signalling code from an n^{th} order set of orthogonal signalling codes of length 2^n for a communications system, the signalling code corresponding to a code spur, comprising:

selecting an odd number of at least three signalling codes from the n^{th} order set of orthogonal signalling codes within a code space;

performing an operation on the at least three signalling codes, the operation corresponding to a vector product of the at least three signalling codes, when the at least three signalling codes are expressed in a bipolar form, to predict the signalling code corresponding to the code spur, ~~A method as claimed in Claim 1,~~ wherein the at least three signalling codes comprise a plurality of signalling codes, the method further comprising ~~the step of~~:

generating the plurality of signalling codes as a substitute for another signalling code, the another signalling code occupying a portion of the code space and being a member of an $(n - x)^{th}$ set of orthogonal signalling codes of length $2^{(n-x)}$, where x is less than n and the plurality of signalling codes are orthogonal with each other and occupy substantially all of the portion of the code space.

3. (Original) A method as claimed in Claim 2, wherein the plurality of signalling codes are members of a further set of signalling codes of order $(n - x + 1)$.

4. (Original) A method as claimed in Claim 3, wherein each of the plurality of signalling codes comprises the another signalling code or a bit inverse thereof concatenated with the another signalling code or the bit inverse thereof, and the each of the plurality of signalling codes constituting an orthogonal signalling code with respect to other signalling codes of the plurality of signalling codes.

5. (Original) A method as claimed in Claim 1, wherein the at least three signalling codes are seven or less signalling codes.

6. (Currently Amended) A method of assigning signalling codes for a spread-spectrum communications system, the method comprising:

compiling a plurality of combinations of orthogonal signalling codes;

for odd combinations of at least three orthogonal signalling codes from each of the plurality of combinations of signalling codes, predicting at least one signalling code corresponding to at least one respective code spur ~~using the method as claimed in Claim 1;~~by performing an operation on the at least three signalling codes, the operation corresponding to a vector product of the at least three signalling codes, when the at least three signalling codes are expressed in a bipolar form, to predict the signalling code corresponding to the code spur; and

identifying a combination of signalling codes from the plurality of combinations of signalling codes having a lower occurrence of code spurs coinciding with active signalling codes than other combinations of signalling codes amongst the plurality of combinations of signalling codes.

7. (Currently Amended) A computer ~~program element comprising computer program code means to make a computer execute~~ readable medium encoded with computer executable instructions to perform the method as claimed in Claim 1.

8. (Cancelled)

9. (Original) A signalling code domain comprising a combination of active signalling codes generated using the method as claimed in Claim 1.

10. (Currently Amended) A transmitter apparatus for a spread-spectrum communications system, the apparatus comprising:

a transmitter chain; and

a processor coupled to the transmitter chain, the processor being arranged to:

select an odd number of at least three signalling codes from the n^{th} order set of orthogonal signalling codes within a code space, ~~and~~

perform an operation on the at least three signalling codes, the operation corresponding to a vector product of the at least three signalling codes, when the at least three signalling codes are expressed in a bipolar form, to predict the signalling code corresponding to the code spur; and

identify signalling codes from the n^{th} order set of orthogonal signalling codes of length 2^n having a lower occurrence of code spurs coinciding with active signalling codes than signalling codes amongst the n^{th} order set of orthogonal signalling codes.

11. (Original) A base station comprising the transmitter apparatus as claimed in Claim 10.

12. (Original) A spread-spectrum communications system comprising the transmitter apparatus as claimed in Claim 10.

13. (Currently Amended) A use of a vector product of first signalling codes expressed in a bipolar form to predict a signalling code corresponding to a code spur and an identification of second signalling codes having a lower occurrence of code spurs coinciding with active signalling codes than signalling codes amongst the first signalling codes.